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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,391	11/10/2003	Joy Vannelia Hughes	018563-005910US	4356

46718 7590 03/29/2006

TOWNSEND AND TOWNSEND AND CREW, LLP (018563)
TWO EMBARCADERO CENTER, EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

MANAHAN, TODD E

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,391

Applicant(s)

HUGHES ET AL.

Examiner

Todd E. Manahan

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/23/04; 9/13/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Double Patenting

1. Applicant (or the assignee of this application if the assignee has undertaken the prosecution of the application) is required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
2. There are numerous other co-pending applications and issued patents, which disclose and claim very similar and/or identical subject matter. In accordance with 37 CFR 1.105 and MPEP 704.11(a) subsection G, applicant (or the assignee) is respectfully requested to disclose all co-pending applications and related patents (please see the non-exhaustive list below of applications and issued patents that the USPTO believes may be related) and identify the specific claims of those applications and/or patents which may present double patenting issues with the instant application claims. This requirement is reasonably necessary to examination because, based on an initial review of the applications, there is a significant degree of overlap in claimed subject matter, thus requiring an analysis of commonality of claimed subject matter to determine patentability under 35 USC 101 double patenting and/or obviousness type double patenting. For example, claim 26 of application serial number 09/640,328 is substantially identical to claim 1 of application serial number 10/633,015 and claims 1-26 of application serial number 09/640,328 and claims 1-31 of application serial number 10/633,015 differ from claims 1-25 of application serial number 10/705,391 in only the obvious variation of the fact that the more specific claims

Art Unit: 3732

of both application serial number 09/640,328 and 10/633,015 “anticipate” the broader claims of application serial number 10/705,391. Because the applicant (or the assignee) is presumably far more cognizant of the contents of the claims in these applications than any Office staff, and has access to the source documents by which such comparison could be done better than within the Office, it is reasonable to require the applicant to provide the information needed to determine the commonality among the claims.

3. Should applicant (or the assignee) believe that Double Patenting exists, then applicant (or the assignee) is invited to file Terminal Disclaimers and/or amend the currently pending claims in the interest of expediting the prosecution of the current application. Applicant (or the assignee) should note that a terminal disclaimer is effective to overcome an obviousness type double patenting rejection, but will not overcome a “same type” double patenting rejection under 35 U.S.C. 101

4. Non-exhaustive list of possible related co-pending applications and patents:

09/169,034
09/264,547
09/311,716
09/311,941
09/454,786
09/506,419
09/539,021
09/576,721
09/640,328
09/686,190
09/757,044
09/779,802
09/791,650
09/792,082
09/843,246
09/847,904

Art Unit: 3732

09/888,261
10/047,077
10/087,126
10/087,153
10/099,310
10/133,155
10/159,242
10/228,885
10/241,240
10/271,665
10/280,556
10/359,998
10/404,178
10/428,396
10/483,071
10/633,015
10/637,187
10/691,755
10/670,162
10/691,755
10/691,942
10/705,391
10/718,779
10/751,847
10/788,510
10/799,432
10/802,124
10/930,700
10/980,418
11/011,271
11/096,627
11/109,978
11/227,810

Information Disclosure Statement

The information disclosure statement filed 13 September 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because applicant did not provide a legible copy of all non-U.S. patents. The images on the CD-ROM are of such poor quality as to render them unreadable. Furthermore, the CD-ROM submission does not comply with 37 CFR 1.52(E) because the files are not in ASCII format and it does not contain proper subject matter for CD-

Art Unit: 3732

ROM submission (see 37 CFR 1.52). It has been placed in the application file, but the non-U.S. documents referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Chishti et al. (PCT Publication WO 98/58596 A1).

Chishti et al. disclose a computer implemented method, system, computer program on a tangible medium and computer system of separating a three-dimensional polygonal structure from an adjacent structure. The adjacent structure may include the extraneous gum area so as to leave only the tooth which increases data processing speed and enhances visual display (see page 17, line 16 through page 18, line 34) The method comprises defining a cutting surface using

Art Unit: 3732

cubic B-spline curves and applying the cutting surface between the tooth and the structure to separate the tooth from the structure.

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Jones et al. (United States Patent No. 6,409,504)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd E. Manahan whose telephone number is 571 272- 4713. The examiner can normally be reached on Mon-Fri.

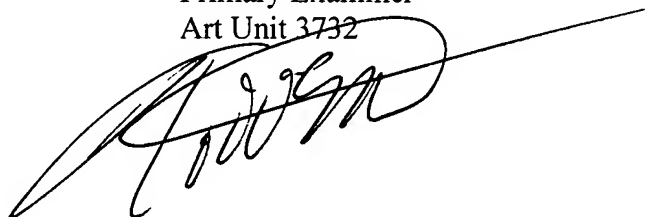
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571 273-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.E. Manahan
22 March 2006

Todd E. Manahan
Primary Examiner
Art Unit 3732

A handwritten signature in black ink, appearing to read 'Todd E. Manahan', written over a horizontal line.A handwritten signature in black ink, appearing to read 'Frederick R. Schmidt', written in a stylized, cursive manner.

FREDERICK R. SCHMIDT
DIRECTOR
TECHNOLOGY CENTER 3700